

ABSTRACT OF THE DISCLOSURE

A network node has multiple physical layer devices (PHYs), multiple media access controllers, and means for gathering and utilizing information regarding the capabilities of other nodes on the network. The node capability information may be gathered using hardware or software, and may involve gathering information from data frames received by the node, and/or from capability and status announcement frames received by the node. Hardware means for gathering the node capability information may include a receive processing block and/or a node discovery block, which examine all or portions of received frames, and which include a look-up table for storing and receiving information such as desired transmission rates for frames sent to other nodes. The PHYs of the interface in an exemplary embodiment are able to transmit and receive data frames or packets which are in accordance with different home phoneline networking alliance (HPNA) specifications, for example, HPNA 1.0 and HPNA 2.0.

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